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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/629,024 | 07/28/2003 | Peter G. Webb | 10003513-2 | 7639 |

7590 06/05/2007
AGILENT TECHNOLOGIES, INC.
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| EXAMINER |
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GROSS, CHRISTOPHER M

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| ART UNIT | PAPER NUMBER |
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1639

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| MAIL DATE | DELIVERY MODE |
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06/05/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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|------------------------------|---|---------------------------------------|--|
| Office Action Summary | Application No. 10/629,024 | Applicant(s) WEBB, PETER G. | |
| | Examiner Christopher M. Gross | Art Unit 1639 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 29 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/29/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Responsive to communications entered 6/29/2006. Claims 17-35 are pending. Claims 17-35 are under consideration.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Election/Restrictions

Applicant's election with traverse of group II, claims 17-28 and 32 in the reply entered on 2/21/2006 is again acknowledged. The traversal is on the ground(s) that the elements of group II are also present in group III. Applicant's arguments were deemed persuasive and claims 29-31 and 33-34 were rejoined in the Office Action mailed 4/5/2006.

Priority

This application is a DIV of application 09/628963, filed on 7/31/2000 (now PAT 6599693). Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 121 is again acknowledged.

Withdrawn Objection(s) and/or Rejection(s)

The provisional rejection of claims 17-34 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 20-35 of copending Application No. 10/649105 is hereby withdrawn in view of applicant's filing a terminal disclaimer.

The rejection of claims 24 and 32 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter

which applicant regards as the invention is hereby withdrawn in view of applicant's amendments to the claims.

Maintained Claim Rejection(s) - 35 USC § 102

Claims 17, 18, 20-23, 25, 26, 28, 29-31, 33-34 are rejected under 35 U.S.C. 102(a or e) as being anticipated by **Gamble et al** (US Patent 6001309).

Response to Arguments

Applicant argues not all elements are taught.

Applicant's arguments have been fully considered but they are not deemed persuasive for the following reasons.

Specifically, applicant argues, see p 6-7 (6/29/2006), Gamble et al do not teach jets depositing "neighboring" drops on a substrate however applicants attention is respectfully invited column 12, lines 26-28 where Gamble et al teach 2-3 spot redundancy (duplication), representing a type of neighboring feature set, comprised of neighboring identical deposited drops, as mentioned in the last Office Action on page 5, first paragraph. It is noted on p7 lines 3-4 (Applicants Remarks, 6/29/2006) that deposited moieties may be the same.

Moreover, Gamble et al teach the preparation of 5 x 5 neighboring feature sets as part of a 7 x 5 larger array in figure 6, as described in the last Office Action in the first paragraph on page 6.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a dropping protocol wherein every particular location is assigned a specific

dispenser) are not recited in the rejected claim(s), which are drawn to "corresponding same dispenser" and "drops deposited by respective different dispensers," which giving the claims the broadest reasonable interpretation read on the apparatus according to Gamble et al. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claims 17,18,21,26,29,30,34 are rejected under 35 U.S.C. 102(b) as being anticipated by **Baldeschieler et al** (US Patent 5847105 – IDS entry 2/21/2006)

Applicant argues not all elements are taught.

Applicant's arguments have been fully considered but they are not deemed persuasive for the following reasons.

Specifically, applicant argues, see p 8 (6/29/2006), Baldeschieler et al do not teach jets depositing "neighboring" drops on a substrate formed from drops deposited by respective different dispensers, however applicants attention is respectfully invited column 6, lines 64-67 where Baldeschieler et al teach a raster (back and forth motion) approach toward synthesizing oligonucleotides. Baldeschieler et al, as quoted by applicant, see p 8, states "the simplest design...is a five jet system, one jet each for the four phosphoramidite reagents and one jet for the activating tetrazole." Therein, it is the Examiner's position that in synthesizing the oligonucleotides AAAA next to TTTT next to CCCC next to GGGG as "neighboring features," each tetranucleotide would effectively be assigned its own dispenser jet, and provide drops deposited by respective different

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dispensers. It is noted on p7 lines 3-4 (Applicants Remarks, 6/29/2006) that moieties (i.e. adenosine nucleoside phosphoramidite; thymidine nucleoside phosphoramidite; cytosine nucleoside phosphoramidite or guanine nucleoside phosphoramidite) may be the same.

Maintained Claim Rejection(s) - 35 USC § 103

Claims 17, 18, 20-23, 25, 26, 28, 29-31, 33-34 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Gamble et al** (US Patent 6001309) in view of **Suovaniemi et al** (US Patent 4215092).

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Gamble et al** (US Patent 6001309) in view of **Suovaniemi et al** (US Patent 4215092) as applied to claims 17,18,20-23, 25, 26, 28, 29-31, 33-34 and 19 above, and further in view of **Quinn et al** (US Patent 4685998)

Response to Arguments

Applicant does not offer further arguments regarding the above obviousness rejections beyond what was set forth with regard to the 35 U.S.C. § 102 rejection. To the extent that Applicant is merely repeating their previous argument, the Examiner contends that those issues were adequately addressed in the above sections, which are incorporated in their entireties herein by reference.

New Claim Rejections - 35 USC § 103

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 17,18, 21, 26,29,30,34 and 24,32,35 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Baldeschieler et al** (US Patent 5847105 – IDS entry 2/21/2006) in view of **Bass** (US Patent 6420180)

This rejection is necessitated by Applicant's amendment to the claims.

Baldeschieler et al is relied on as above and per the last office action.

Baldeschieler et al do not teach at least ten different dispensers (claims 24,32) or a pulse jet dispensers having a displacement error (claim 35).

Bass teaches, throughout the document and especially column 7 line 44 through column 8 lines 1-36 a manner of compensating for displacement errors. Bass further teach in figure 7 a head comprising more than ten dispensers.

It would have been *prima facie* obvious for one of ordinary skill in the art, at the time the claimed invention was made to utilize the process of compensating for displacement errors comprising a head with more than ten dispensers of Bass in concert with the inkjet apparatus presented by Baldeschieler et al.

One of ordinary skill in the art would have been motivated to use the process of compensating for displacement errors comprising a head with more than ten dispensers of Bass in concert with the inkjet apparatus presented by Baldeschwieler et al because it is desirable to provide a means by which serious errors would be reduced, as noted by Bass in column 3, lines 12-13, in order to generate higher quality microarrays.

One of ordinary skill in the art would have had a reasonable expectation of success in compensating for displacement errors comprising a head with more than ten dispensers per Bass in concert with the inkjet apparatus presented by Baldeschwieler et al because both Bass and Baldeschwieler et al concern inkjet mediated oligonucleotide synthesis directed toward the preparation of microarrays. Thus, the protocol and head of Bass lies well within the scope of the teaching(s) of Baldeschwieler et al.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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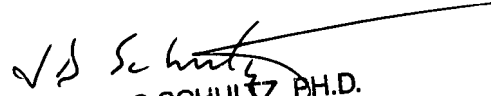
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Gross whose telephone number is (571)272-4446. The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. Douglas Schultz can be reached on 571 272-0763. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Christopher M Gross
Examiner
Art Unit 1639

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J. DOUGLAS SCHULTZ, PH.D.
SUPERVISORY PATENT EXAMINER